

## Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Time period of simple pendulum is independent of	A. length B. mass C. acceleration due to gravity D. none of them
2	A car is turning around a corner at 10 m/sec as it travels along an arc of a circle. If value of centripetal acceleration is 10 m/sec <sup>2</sup> in this case, find radius of the circular path:	A. 1 m B. 5 m C. 10 m D. 15 m
3	The threshold frequency of sodium is $6 \times 10^6$ MHz. The cut-off wavelength for this metal will be	A. 500 m B. 500 nm C. 500 km D. 500 cm E. None of these
4	CRO deflects the beam of	A. proton B. $\alpha$ -particle C. electron D. neutron
5	At constant volume temperature is increased. Then	A. Collision on walls will be less B. Number of collisions per unit time will increase C. Collision will be in straight lines D. Collision will not change
6	A one microfarad capacitor of a TV is subjected to 4000 V potential difference. The energy stored in capacitor is	A. 8 J B. 16 J C. $4 \times 10^{-3}$ J D. $2 \times 10^{-3}$ J
7	The current that flows through the coil of a motor causes	A. Its shaft to revolve B. Its brushes to rotate C. Motor to move D. Its shaft to rotate E. None of these
8	The blood pressure of a person	A. decrease with age B. increase with age C. has no effect with age D. none of them
9	The critical temperature of aluminium is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
10	If a charged spherical conductor of radius 10 cm has potential V at a point distance 5 cm from its centre, then the potential at a point distance 15 cm from the centre will be	A. $\frac{1}{3}$ V B. $\frac{2}{3}$ V C. $\frac{3}{2}$ V D. 3V
11	the dilation of time applies to the timing processes which are:	A. Physical B. Chemical C. Biological D. All of these E. None of these
12	The material in the form of wire or rod or plate which leads the current into or out of the electrolyte is known as	A. voltmeters B. resistance C. electrode D. current
13	The net force acting on a 100 kg man standing in an elevator accelerating downward with a $= 0.8 \text{ m sec}^{-2}$ comes out to:	A. 980 N B. 580 N C. 1380 N D. Zero
		A. 90 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span> - 120 <span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;">°</span>

14	In a three phase a.c generator if the first coil has a phase 0, then the other two coils will have phases	<p>small;"&gt;"&lt;/span&gt;  B. 20&lt;span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;"&gt;"° and 140&lt;/span&gt;&lt;span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;"&gt;"°&lt;/span&gt;  C. 120&lt;span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;"&gt;"° and 240&lt;/span&gt;&lt;span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;"&gt;"°&lt;/span&gt;  D. 120&lt;span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;"&gt;"° and 140&lt;/span&gt;&lt;span style="color: rgb(84, 84, 84); font-family: arial, sans-serif; font-size: small;"&gt;"°&lt;/span&gt;</p>
15	The velocity of sound is greatest in	<p>A. Water  B. Air  C. Vacuum  D. Metal</p>
16	The vibratory or oscillatory motion of a body is	<p>A. translatory motion  B. back and forth motion about its mean position  C. free all motion  D. circular motion</p>
17	A person standing near the track of a fast moving train has tendency to fall towards it because of	<p>A. Vibration due to motion of train  B. Gravitation force of attraction between person and trains  C. The high speed of train  D. Some other effect</p>
18	$\beta$ -particles are easily deflected by collisions than heavy	<p>A. &lt;span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"&gt;"<math>\alpha</math>-particles&lt;/span&gt;  B. &lt;span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"&gt;"<math>\beta</math>-particles&lt;/span&gt;  C. &lt;span style="color: rgb(34, 34, 34); font-family: arial, sans-serif; font-size: small;"&gt;"<math>\gamma</math>-particles&lt;/span&gt;  D. none of these</p>
19	The solids are classified as:	<p>A. Metals  B. Crystalline  C. Amorphous  D. Polymeric  E. All except (A)</p>
20	The time interval during which the Voltage source changes its polarity once is known as:	<p>A. Time period T  B. Half the time period  C. Quarter the time period  D. Two third of the time period  E. None of these</p>